

IN THE SPECIFICATION:

Please replace paragraph 6 at page 35 continuing onto page 36, with the following rewritten paragraph:

At step ~~S211 S21~~, the operation section 113 decodes the instruction allocated to that input process packet PP_b and the process goes to step ~~S212 S22~~. At step ~~S212 S22~~, the operation section 113 decides whether the instruction decoded at step ~~S211 S21~~ is executable, in this case, whether the write address allocated to the input process packet PP_b is present in addresses in the memory 120_n that the operation processing unit 102_n has.

Please replace paragraphs 1, 2, 3 and 4 at page 36, with the following rewritten paragraph:

If having decided at step ~~S212 S22~~ that the write address allocated to the process packet is not present in the addresses in the memory 120_n that the operation processing unit 102_n has, the operation section 113 skips steps ~~S212-S215 S22-S25~~ and the process goes to step ~~S216 S26~~ where it sets the request signal s₂ to "1". At step ~~S217 S27~~, the operation section 113 makes the input process packet PP_b as it is a process packet PP_c to be output and outputs it and the process goes to step ~~S218 S28~~ where it returns the request signal s₂ to "0" to end the processing.

If having decided at step ~~S212 S22~~ that the write address allocated to the process packet is present in the addresses in the memory 120_n that the operation processing unit 102_n has, the process goes to step ~~S213 S23~~ where the operation section 113 decides whether the same process packet as this input process packet PP_b has been input in the past and processed already. If the operation section 113 decides that it has been processed, the operation section 113 performs no processing on that input process packet PP_b and ends the processing. In this case, the input

process packet PPb is unnecessary, so that the operation section 113 will not output a process packet that corresponds to this input process packet PPb.

If having decided at step ~~S213 S23~~ that it has not yet been processed, the process goes to step ~~S214 S24~~ where the operation section 113 executes the instruction allocated to the input process packet PPb. That is, the operation section 113 writes the image data allocated in the input process packet PPb into the memory 120_n and the process goes to step ~~S215 S25~~.

At step ~~S215 S25~~, the operation section 113 rewrites, as necessary, the state portion in the input process packet PPb in accordance with the processing it has performed at step ~~S214 S24~~ and the process goes to step ~~S216 S26~~.

Please replace paragraph 1 at page 37, with the following rewritten paragraph:

At step ~~S216 S26~~, the operation section 113 sets the request signal s₂ to "1". At step ~~S217 S27~~, the operation section 113 makes the input process packet PPb altered at steps ~~S214 S24~~ and ~~S215 S25~~ a process packet PPc to be output and outputs it and then, at step ~~S218 S28~~, returns the request signal s₂ to "0" to end the processing.

Please replace paragraphs 1, 2, 3 and 4 at page 38 continuing onto page 39, with the following rewritten paragraph:

At step ~~S311 S31~~, the operation section 113 decodes the instruction allocated to that input process packet PPb and the process goes to step ~~S312 S32~~. At step ~~S312 S32~~, the operation section 113 decides whether the instruction decoded at step ~~S311 S31~~ is executable, in this case, whether the read address allocated to the input process packet PPb is present in addresses in the memory 120_n that the operation processing unit 102_n has.

If having decided at step S312 S32 that the read address allocated to the process packet is not present in the addresses in the memory 120_n that the operation processing unit 102_n has, the operation section 113 skips steps S313-S315 S33-S35 and the process goes to step S316 S36 where the operation section 113 sets the request signal s₂ to "1". At step S317 S37, the operation section 113 makes the input process packet PP_b as it is a process packet PP_c to be output and outputs it and the process goes to step S318 S38 where it returns the request signal s₂ to "0" to end the processing.

If having decided at step S312 S32 that the read address allocated to the process packet is present in the addresses in the memory 120_n that the operation processing unit 102_n has, the process goes to step S313 S33 where the operation section 113 decides whether the same process packet as this input process packet PP_b has been input in the past and processed already. If the operation section 113 decides that it has been processed, the operation section 113 performs no processing on that input process packet PP_b and ends the processing. In this case, the input process packet PP_b is unnecessary, so that the operation section 113 will not output a process packet that corresponds to this input process packet PP_b.

If the operation section 113 has decided at step S313 S33 that it has not yet been processed, the process goes to step S314 S34 where it executes the instruction allocated to the input process packet PP_b. That is, the operation section 113 reads the image data from the memory 120_n and allocates the image data to the input process packet PP_b and the process goes to step S315 S35.

Please replace paragraphs 1, 2 and 5 at page 39, with the following rewritten paragraph:

At step ~~S315 S35~~, the operation section 113 rewrites, as necessary, the state portion in the input process packet PP_b in accordance with the processing it has performed at step ~~S314 S34~~ and the process goes to step ~~S316 S36~~.

At step ~~S316 S36~~, the operation section 113 sets the request signal s₂ to "1". At step ~~S317 S37~~, the operation section 113 makes the input process packet PP_b altered at steps ~~S314 S34~~ and ~~S315 S35~~ a process packet PP_c to be output and outputs it and then, at step ~~S318 S38~~, returns the request signal s₂ to "0" to end the processing.

At step ~~S411 S41~~, the operation section 113 decodes the instruction allocated to that input process packet PP_b and the process goes to step ~~S412 S42~~. At step ~~S412 S42~~, the operation section 113 decides whether the instruction decoded at step ~~S411 S41~~ is executable, in this case, whether pixels of at least one of the target block and the candidate block are stored in the memory 120_n that the operation processing unit 102_n has.

Please replace paragraphs 2, 3 and 4 at page 40, with the following rewritten paragraph:

If having decided at step ~~S412 S42~~ that neither the target block nor the candidate block is stored in the memory 120_n that the operation processing unit 102_n has, the operation section 113 skips steps ~~S413-S415 S43-S45~~ ad the process goes to step ~~S416 S46~~ where it sets the request signal s₂ to "1". At step ~~S417 S47~~, the operation section 113 makes the input process packet PP_b as it is a process packet PP_c to be output and outputs it and the process goes to step ~~S418 S48~~ where the operation section 113 returns the request signal s₂ to "0" to end the processing.

If having decided at step S412 S42 that the pixels of at least one of the target block and the candidate block are stored in the memory 120_n that the operation processing unit 102_n has, on the other hand, the process goes to step S413 S43 where the operation section 113 decides whether the same process packet as this input process packet PP_b has been input in the past and processed already. If the operation section 113 decides that it has been processed, the operation section 113 performs no processing on that input process packet PP_b and ends the processing. In this case, the input process packet PP_b is unnecessary, so that the operation section 113 will not output a process packet that corresponds to this input process packet PP_b.

If having decided at step S413 S43 that it has not yet been processed, on the other hand, the process goes to step S414 S44 where the operation section 113 executes the instruction allocated to the input process packet PP_b.

Please replace paragraphs 1, 2, 3, 4 and 5 at page 41 continuing onto page 42, with the following rewritten paragraph:

That is, at step S521 S51, the operation section 113 first decides whether the pixels of the target block are stored in the memory 120_n that the operation processing unit 102_n has. If having decided at step S521 S51 that the pixels of the target block are not stored in the memory 120_n that the operation processing unit 102_n has, the operation section 113 skips step S522 S52 and the process goes to step S523 S53.

If having decided at step S521 S51 that the pixels of the target block are stored in the memory 120_n that the operation processing unit 102_n has, on the other hand, the process goes to step S522 S52 where the operation section 113 reads the pixels of the target block stored in the

memory 120_n, and allocates them to the input process packet PP_b, and the process goes to step S523 S53.

At step S523 S53, the operation section 113 decides whether the pixels of the candidate block are stored in the memory 120_n that the operation processing unit 102_n has. If having decided at step S523 S53 that the pixels of the candidate block are not stored in the memory 120_n that the operation processing unit 102_n has, the operation section 113 skips step S524 S54 and the process goes to step S525 S55.

If having decided at step S523 S53 that the pixels of the candidate block are stored in the memory 120_n that the operation processing unit 102_n has, on the other hand, the process goes to step S524 S54 where the operation section 113 reads the pixels of the candidate block stored in the memory 120_n, and allocates them to the input process packet PP_b, and the process goes to step S525 S55.

At step S525 S55, the operation section 113 decides whether an absolute difference value sum can be calculated. In this case, the operation section 113 decides whether the calculation of the absolute difference value sum can be performed based on whether in the input process packet PP_b, the pixels of the target block are allocated and also the pixels of the candidate block that corresponds to this target block are allocated.

Please replace paragraphs 1, 2, 3 and 4 at page 42, with the following rewritten paragraph:

If having decided at step S525 S55 that the calculation of the absolute difference value sum is impossible, that is, if in the pixels of the target block are not allocated to the input process packet PP_b or though the pixels of the target block are allocated, the pixels of the candidate

block that corresponds to this target block are not allocated thereto, the operation section 113 skips step S526 S56 to end execution of the absolute-difference-value sum calculation instruction and the process goes to step S415 S45.

If having decided at step S525 S55 that the calculation of the absolute difference value sum is possible, that is, if the pixels of the target block are allocated to the input process packet PPb as well as the pixels of the candidate block that corresponds to this target block are allocated to the input process packet PPb, on the other hand, the process goes to step S526 S56 where the operation section 113 calculates an absolute difference value between each of the pixels of the target block allocated to the input process packet PPb and each of the pixels of the corresponding candidate block and also calculate a total sum of these values.

The operation section 113 adds up this total sum of these absolute difference values and an absolute difference value sum allocated to the absolute-difference-value sum portion in the input process packet PPb and overwrites it by the added value as a new absolute difference value sum in the absolute-difference-value sum portion in the input process packet PPb, to end execution of the absolute-difference-value sum calculation instruction and the process goes to step S415 S45.

At step S415 S45, the operation section 113 rewrites as necessary the state portion in the input process packet PPb in accordance with processing it has performed at step S414 S44 and the process goes to S416 S46.

Please replace paragraph 1 at page 43, with the following rewritten paragraph:

At step S416 S46, the operation section 113 sets the request signal s_2 to "1". At step S417 S47, the operation section 113 makes the input process packet PPb altered at steps S414

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S44 and S415 S45 a process packet PPc to be output and outputs it and then, at step S418 S48, returns the request signal s₂ to "0" to end the processing.